IN THE CLAIMS

Please amend the claims as follows:

1. (original) Method for increasing the sensitivity of a chain of amplifiers that comprises the steps of: amplifying a signal by means of a first amplifier with a gain factor $A_1=A_{1,m}*\Delta A_1$, where $A_{1,m}$ denotes a constant gain factor and ΔA_1 denotes a gain factor variation with $1\leq \Delta A_{1,min} \leq \Delta A_1\leq \Delta A_{1,max}$, further amplifying the signal by means of a second amplifier with a controllable gain factor $A_2 \leq A_{2,max}$, where variations ΔA_1 of the gain of the first amplifier are compensated by reducing the gain A_2 of the second amplifier, so that the difference between the chain gain factor $A_C=A_1*A_2$ and a target chain gain factor $A_T \leq A_{T,max}$ becomes zero, characterised in that the signal at the output of the second amplifier is additionally fed into a divider that applies a fixed factor $A_3 \leq 1$ to its input, that variations ΔA_1 of the gain factor A_1 of the first amplifier as well as the fixed factor A_3 are at least partially compensated by the gain factor A_2 of the second amplifier, so that the difference between the chain gain factor $A_C'=A_1*A_2*A_3$ and the target chain gain factor A_T becomes minimum, and that the fixed factor A_3 is chosen so that there exist at least some combinations of values ΔA_1 and A_T for which said difference can be forced to zero, and some combinations of values ΔA_1 and A_T, for

which said difference can no longer be forced to zero due to the limitation $A_2 \leq A_{2,max}$.

2. (original) Method according to claim 1, characterised in that said factor A_3 is chosen so that said difference can be forced to zero for large values of the variation ΔA_1 and/or small values A_T, and that said difference can no longer be forced to zero for small values of the variation ΔA_1 and/or large values A_T.

3. (currently amended) Method according to ~~any of the claims 1-2~~claim 1, characterised in said fixed factor A_3 is further chosen so that for a group of target chain gain factors A_T, the second amplifier works with a gain factor A_2 that is close to its maximum gain factor $A_{2,max}$, that for these target chain gain factors, the greatest possible independence of the gain factor A_2 from the variation ΔA_1 is achieved and that a difference between the chain gain factor A_C' and the target chain gain factor A_T is accepted especially for smaller values of ΔA_1.

4. (original) Method according to claim 3, characterised in that group of target chain gain factors A_T are the most frequently occurring target chain gain factors.

5. (currently amended) Method according to ~~any of the claims 1-4~~claim 1, characterised in that the gain factor A_1 defines the product between the maximum gain factor of a tuner that down-converts a modulated Radio Frequency (RF) signal to a broadband Intermediate Frequency (IF) signal and the gain factor of an IF filter that transforms the broadband IF signal into a narrowband IF signal, where the gain factor of the IF filter is fixed and the maximum gain factor of the tuner varies, and that the gain factor A_2 represents the gain factor of an IF amplifier that amplifies the narrowband IF signal to produce an amplified narrowband IF signal that is fed into a demodulation instance to produce a demodulated signal.

6. (original) Method according to claim 5, characterised in that said at least partial compensation of said variations ΔA_1 of the gain factor of the first amplifier as well as of said fixed factor A_3 of the divider by controlling the gain factor A_2 of the second amplifier to achieve a minimum difference between the chain gain factor $A_C'=A_1*A_2*A_3$ and the target chain gain factor A_T represents a part of one out of the two steps of a joint control of the gains of the tuner and the IF amplifier, which is performed in order to force the signal level of the amplified narrowband IF signal at the input of the demodulator to a constant target value, where for

steadily increasing RF signal levels said two steps are defined as: a first step of keeping the gain factor of the tuner at its maximum value and varying the gain factor of the IF amplifier so that the difference between the chain gain factor $A_C'=A_1*A_2*A_3$ and the target chain gain factor A_T, which steadily reduces with the steadily increasing RF signal levels, becomes minimum, until the broadband IF signal exceeds a dedicated dynamic range at a take-over point, and a second step of not further reducing the gain factor A_2 from said take-over point on and starting to steadily reduce the gain factor of the tuner below its maximum value instead.

7. (original) Method according to claim 6, characterised in that for said combinations of values ΔA_1 and A_T, for which said difference between the chain gain factor A_C' and the target chain gain factor A_T can no longer be forced to zero due to the limitation

$A_2 \leq A_{2,max}$ and the signal level of the amplified narrowband IF signal at the input of the demodulator falls below the constant target value accordingly, the degradation of the quality of the demodulated signal compared to the case when said difference can be forced to zero is insignificant.

8. (original) Device for increasing the sensitivity of a chain of

amplifiers, comprising: a first amplifier for amplifying a signal by a gain factor $A_1=A_{1,m}*\Delta A_1$, where $A_{1,m}$ denotes a fixed gain factor and ΔA_1 denotes a gain factor variation with $1\leq \Delta A_{1,min} \leq \Delta A_1\leq \Delta A_{1,max}$, a second amplifier for further amplifying the signal by a controllable gain factor $A_2 \leq A_{2,max}$, where the second amplifier compensates the variations ΔA_1 of the gain of the first amplifier, so that the difference between the chain gain factor $A_C=A_1*A_2$ and a target chain gain factor $A_T \leq A_{T,max}$ becomes zero, characterised in that the device further comprises a divider that is arranged behind the second amplifier and applies a fixed factor $A_3 \leq 1$ to its input, where the second amplifier at least partially compensates the variations ΔA_1 of the gain factor A_1 of the first amplifier as well as the fixed factor A_3, so that the difference between the chain gain factor $A_C'=A_1*A_2*A_3$ and the target chain gain factor A_T becomes minimum, and where the fixed factor A_3 is chosen so that there exist at least some combinations of values ΔA_1 and A_T for which said difference can be forced to zero, and some combinations of values ΔA_1 and A_T, for which said difference can no longer be forced to zero due to the limitation $A_2 \leq A_{2,max}$.

9. (original) Device according to claim 8, characterised in that the first amplifier represents both a tuner that down-converts a modulated Radio Frequency (RF) signal to a broadband Intermediate

Frequency (IF) signal and an IF filter that transforms the broadband IF signal into a narrowband IF signal, where the gain factor of the IF filter is fixed and the maximum gain factor of the tuner varies due to the manufacturing process, and that the second amplifier represents an IF amplifier that amplifies the narrowband IF signal to produce an amplified narrowband IF signal that is fed into a demodulation instance to produce a demodulated signal.

10. (currently amended) Device according to ~~any of the claims 8-9~~claim 8, characterised in that said divider is a voltage divider.